



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/694,835	10/29/2003	Alan Blake Darlington	221-46US	2479
23716	7590	06/08/2006	EXAMINER	
<b>ANTHONY ASQUITH</b> 28-461 COLUMBIA STREET WEST WATERLOO, ON N2T 2P5 CANADA				REDDING, DAVID A
		ART UNIT		PAPER NUMBER
		1744		

DATE MAILED: 06/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/694,835	DARLINGTON ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	David A. Redding	1744	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### **Status**

1) Responsive to communication(s) filed on 08 May 2006.  
 2a) This action is **FINAL**.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### **Disposition of Claims**

4) Claim(s) 1-14 and 17 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-14 and 17 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### **Application Papers**

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### **Priority under 35 U.S.C. § 119**

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
     1. Certified copies of the priority documents have been received.  
     2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
     3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### **Attachment(s)**

1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
     Paper No(s)/Mail Date \_\_\_\_\_.

4) Interview Summary (PTO-413)  
     Paper No(s)/Mail Date. \_\_\_\_\_.  
 5) Notice of Informal Patent Application (PTO-152)  
 6) Other: \_\_\_\_\_.

## DETAILED ACTION

### *Response to Amendment*

The amendment filed 5/8/06 has been entered. Presently, claims 1-14,17 are pending.

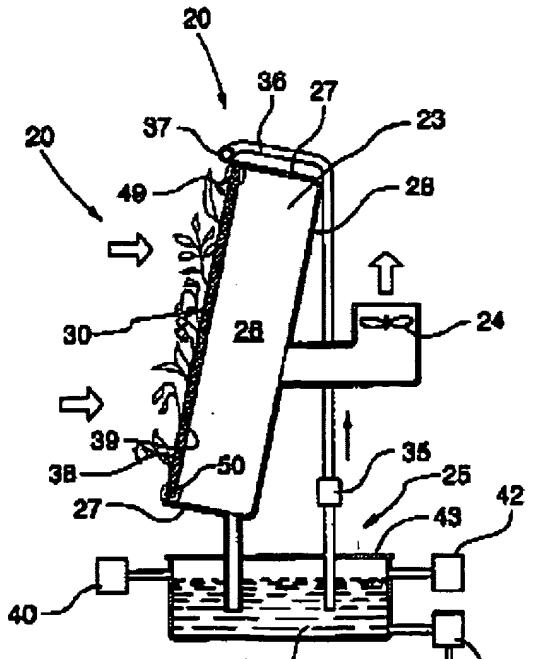
The final rejection mailed 3/8/06 has been withdrawn in view of the new grounds of rejection. The rejection in view of 10/942,872 is withdrawn since two-way obviousness cannot be established. The 112 second paragraph rejections of claims 4 and 16 are withdrawn in view of the amendment.

### *Claim Rejections - 35 USC § 103*

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-14,17, are rejected under 35 U.S.C. 103(a) as being obvious in view of USP 6,727,091 ('091) and USP 5,433,923 (Wolverton et al.).

The '091 patent discloses the same hydroponic apparatus (20) as defined in claim the claims.



The apparatus (20) comprises a body of hydroponic water (34), nutrient station (40), a matrix (30) supporting green plants (see description of figure 1, col. 6, lines 57-64; col. 3, line 17 thru col. 4, line 7). The matrix is disclosed as being a plastic material (polyester), col. 5, lines 9-20. Suitable plants include orchids which are considered to read on claim 6 (col. 7, lines 26-30). The patent differs from the claims in the patent does not specifically disclose using the apparatus (20) for remediating ammonia, specifically, the last step of claim 1.

USP 5,433,923 (Wolverton et al.) discloses that houseplants culture microorganisms on and around their roots capable of destroying indoor air polluting chemicals, specifically ammonia, col. 1, lines 20-27. Accordingly, it would have been obvious to one skilled in the art to arrange the size and efficacy of the hydroponic apparatus in the '091 patent for the removal of ammonia in a room, especially in view of the known practice as disclosed in the Wolverton et al. patent.

Varying the size and arrangement of the plants to maintain the ammonia in the room below a specific level (cl. 2,3,) is considered to be optimization of the known result-effective variable disclosed in the '091 patent (see col. 6, lines 13-22).

In the absence of unexpected results the sizes, dimensions, and proportions specified in claims 13,14,17 are considered to be obvious in view of the sizes and dimensions disclosed in the '091 patent.

The plant species defined in claim 7 are considered to be obvious since any plants which could be grown hydroponically would support microorganisms which are responsible for remediating the ammonia.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David A. Redding whose telephone number is 571-272-1276. The examiner can normally be reached on Mon.-Fri. 6:00 - 3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gladys Corcoran-Piazza can be reached on 571-272-1224. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
David A Redding  
Primary Examiner  
Art Unit 1744

DAR